

Selección de Resúmenes de Menopausia

Semana del 4 al 11 de enero 2022

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Z Rheumatol. 2022 Jan 7. doi: 10.1007/s00393-021-01127-8. Online ahead of print.

Glucocorticoid-induced osteoporosis-Focus treatment (part 1)

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With a fracture prevalence of 30-50%, glucocorticoid (GC)-induced osteoporosis is one of the most important comorbidities in inflammatory rheumatic diseases. Because of a reduction of bone quality with a lack of correlation with bone mineral density, the fracture risk during long-term GC treatment is not sufficiently represented by the currently available methods of osteodensitometry and therefore underestimated. According to the Confederation for Osteology (DVO) guidelines, a baseline osteological diagnosis including osteodensitometry is indicated in all postmenopausal women and in men aged 60 years and older who receive or are scheduled to receive GC at a dose of ≥ 2.5 mg prednisolone equivalent/day for > 3 months. Basic measures in GC-treated patients include vitamin D and calcium supplementation as well as measures to promote muscle strength and coordination and to prevent falls. The indications for a specific osteological treatment depend on the calculated GC dose, age, sex, and other fracture risk factors in addition to bone mineral density and prevalent fractures.

Aust N Z J Obstet Gynaecol. 2022 Jan 7. doi: 10.1111/ajo.13472. Online ahead of print.

Can a higher endometrial thickness threshold exclude endometrial cancer and atypical hyperplasia in asymptomatic postmenopausal women? A systematic review

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Background: Asymptomatic postmenopausal women incidentally found to have thickened endometrium (>4 mm) on transvaginal ultrasound (TVUS) often undergo hysteroscopy and dilatation and curettage despite having a low absolute risk of endometrial cancer. A low threshold for investigation may be unnecessary in these women. Aim: This systematic literature review examines whether an increased TVUS endometrial thickness threshold has superior diagnostic accuracy for endometrial malignancies and premalignancies in asymptomatic postmenopausal women than the current threshold of ≥ 4 mm. Methods: Pubmed, EMBASE and Cochrane Database of Systematic Reviews were systematically searched using keywords for publications between 2011 and 2021. Studies were included if they reported TVUS endometrial thickness analysis in asymptomatic postmenopausal women and excluded if they were written in a non-English language. Quality of evidence in the included articles was evaluated according to recommendations by the Grading of Recommendations Assessment Development and Evaluation Working Group and reported results were tabulated. Results: Of seven studies ($N = 2986$), better evidence identified 12 mm as the optimal diagnostic threshold (area under the curve receiver operating characteristic (AUC ROC) 0.716, 95% CI 0.534-0.897, $P = 0.019$) for endometrial cancer in asymptomatic postmenopausal women. Two higher quality studies ($n = 488$ and $n = 4751$) identified 11 mm as optimal for diagnosing both endometrial carcinoma and atypical hyperplasia (AUC ROC 0.587, 95% CI 0.465-0.708, $P = 0.144$ and 2.59 relative risk, 95% CI 1.66-4.05, $P < 0.001$). Conclusion: Evidence for improved detection of endometrial premalignancies and malignancies using alternative endometrial thickness thresholds is not rigorous. Evidence for improved outcomes using alternative thresholds is inadequate. Observation of asymptomatic postmenopausal women without risk factors and with an endometrial thickness of less than 10 mm may be reasonable.

BMC Public Health. 2022 Jan 6;22(1):27. doi: 10.1186/s12889-021-12410-3.

Association between past oral contraceptive use and the prevalence of hypertension in postmenopausal women: the fifth (2010-2012) Korea National Health and Nutrition Examination Survey (KNHANES V)

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Background: There is little evidence as to whether the use of oral contraceptives(OC) during the fertile years affects the development of postmenopausal hypertension. This study aimed to evaluate the association between past use of OC

and development of hypertension in postmenopausal women. **Methods:** This was a cross-sectional study conducted using data from the Fifth Korea National Health and Nutrition Examination Survey of postmenopausal women. Subjects were classified into three groups based on past OC use duration: nonusers, short-term users (0-30 months), and long-term users (≥ 30 months). We evaluated the development of hypertension in women after menopause. A multivariable logistic regression model was used to identify the association between the use of OC during the fertile years and the prevalence of hypertension after menopause following adjustment for potential confounding factors. **Results:** Of the 3,386 postmenopausal women, 2,713 were nonusers of OC, 489 were short-term users, and 184 were long-term users. Women who had used OC for 30 months or more had a significantly greater prevalence of hypertension after menopause than those who had never taken OC. The association between taking OC for 30 months or more during the fertile years and the prevalence of hypertension after menopause was significant following adjustment for potential confounding factors (adjusted OR:1.75; 95%CI:1.12-2.74). **Conclusion:** This study identified an association between past OC use and an increased prevalence of hypertension in postmenopausal women. Our results suggest that long-term use of OC during the fertile years can be an important risk factor for subsequent hypertension after menopause.

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Vitamin D and the Immune System in Menopause: A Review

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Menopause is a normal phenomenon in a woman's life cycle involving multiple health-related issues that contribute to physical instability. Changes in the immune system in postmenopausal women are caused by estrogen deprivation along with age. Increased proinflammatory serum marker levels, cytokine responses in body cells, decreased CD4 T and B lymphocyte levels, and natural killer cell cytotoxic activity are also observed during postmenopause. Moreover, vitamin D, in addition to its classical effects on calcium homeostasis and bone density, plays an important role. Current evidence indicates that vitamin D regulates innate and adaptive immune responses; however, vitamin D deficiency is linked to increased autoimmune activity and infection susceptibility. This review provides an overview of the consequences of immune alterations as an outcome of aging in postmenopausal women and the benefit of vitamin D supplementation.

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Association of reproductive factors with dementia: A systematic review and dose-response meta-analyses of observational studies

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Background: Associations between endogenous estrogen exposure indicators and risk of subtypes of dementia have been unclear. **Methods:** Databases (PubMed, EMBASE and Web of Science) were searched electronically on 1st July and updated regularly until 12nd November 2021. Observational studies of English language were selected if reported an effect estimate [e.g., odds ratio (OR), rate ratio (RR) or hazard ratio (HR)] and 95% CI for the association between any exposure (age of menarche, age at menopause, reproductive period, estradiol level) and any endpoint variable [all-cause dementia, Alzheimer's disease (AD), vascular dementia (VD), cognitive impairment (CI)]. Random-effects models and dose-response meta-analyses were used to calculate estimates and to show the linear/nonlinear relationship. PROSPERO CRD42021274827. **Findings:** We included 22 studies (475 9764 women) in this analysis. We found no clear relationship between late menarche (≥ 14 vs < 14 years) and dementia, CI in categorical meta-analysis compared to a J-shape relationship in dose-response meta-analyses. Later menopause (≥ 45 vs < 45 years) was consistently associated with a lower risk of all-cause dementia (pooled RR: 0.87, 95%CI: 0.78-0.97, I²=56.0%), AD (0.67, 0.44-0.99, I²=78.3%), VD (0.87, 0.80-0.94) and CI (0.82, 0.71-0.94, I²=19.3%) in categorical meta-analysis, showing similar results in dose-response meta-analyses. An inverse relationship between longer reproductive duration (≥ 35 vs < 35 years) and dementia was observed in dose-response meta-analysis. In addition, estradiol levels after menopause were inversely correlated with the risk of AD and CI. **Interpretation:** In this study, later menopause and longer reproductive period were associated with a lower risk of dementia, while the relationship for menarchal age was J-shaped. There was an inverse relationship between higher postmenopausal estrogen levels and risk of AD and CI. Longitudinal study are needed to further explore the association between life-time estrogen exposure and risk of subtypes of dementia.

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Vitamin D supplementation and prevention of cardiovascular disease and cancer in the Finnish Vitamin D Trial-a randomized controlled trial

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Background: Vitamin D insufficiency is associated with risk of cardiovascular diseases (CVD) and cancer in observational studies, but evidence for benefits with vitamin D supplementation is limited. **Objectives:** To investigate the effects of vitamin D3 supplementation on CVD and cancer incidence. **Design:** The study was a 5-year randomized placebo-controlled trial among 2495 male participants ≥ 60 years and post-menopausal female participants ≥ 65 years from a general Finnish population who were free of prior CVD or cancer. The study had three arms: placebo, 1600 IU/day or 3200 IU/day vitamin D3. Follow-up was by annual study questionnaires and national registry data. A representative sub-cohort of 551 participants had more detailed in-person investigations. The primary endpoints were incident major CVD and invasive cancer. Secondary endpoints included the individual components of the primary CVD endpoint (myocardial infarction, stroke, and CVD mortality), site-specific cancers and cancer death. **Results:** During the follow-up, there were 41 (4.9%), 42 (5.0%) and 36 (4.3%) major CVD events in the placebo, 1600 IU/d (vs. placebo: hazard ratio (HR), 0.97;95% CI, 0.63,1.49; $P = 0.89$), and 3200 IU/d (HR, 0.84;95% CI, 0.54,1.31; $P = 0.44$) arms, respectively. Invasive cancer was diagnosed in 41 (4.9%), 48 (5.8%) and 40 (4.8%) participants in the placebo, 1600 IU/d (HR, 1.14;95% CI, 0.75,1.72; $P = 0.55$), and 3200 IU/d (HR, 0.95;95% CI, 0.61,1.47; $P = 0.81$) arms, respectively. There were no significant differences in the secondary endpoints or total mortality. In the sub-cohort, the mean (standard deviation) baseline serum 25-hydroxyvitamin D concentration was 75 (18) nmol/L. After 12 months, the concentrations were 73 (18) nmol/L, 100 (21) nmol/L and 120 (22) nmol/L in the placebo, 1600 IU/d and 3200 IU/d arms, respectively. **Conclusions:** Vitamin D3 supplementation did not lower the incidence of major CVD events or invasive cancer among older adults, possibly due to sufficient vitamin D status in most participants at baseline.